

Telecommunications Systems Analyst Series

California State Personnel Board Specification

Series established May 7, 1975

Scope

This series specification describes the Telecommunications System Analyst and Manager classes used in the Department of General Services telecommunications program and those State departments which operate radio/microwave and landwire telecommunications systems. The series provides for three levels of analytical and management responsibilities required by departments to ensure efficient use and operation of their administration of a department's telecommunications network. Because the Department of General Services has statewide responsibility for engineering design and installation of telecommunications equipment, the positions collaborate with General Services in the engineering design and installation of telecommunications networks. Additional duties and responsibilities include: consulting and advising management on departmental telecommunications policy and administrative procedures; analyzing and validating operational requirements of a communications program; developing and revising operational requirements and procedures; outlining a conceptual system design including budget estimates for detailed engineering and equipment purchases; performing detailed system designs, site selections, propagation surveys, and coverage calculations; analyzing equipment and performance requirement tradeoffs; preparing communications equipment and procurement specifications; assisting in the selection of vendors; monitoring system installation; providing operator training; preparing applications to the Federal Communications Commission for changes in radio frequencies; conducting acceptance testing and providing evaluation reports; and performing other related work.

Entry into this series typically will be through the class of Telecommunications Systems Analyst I.

Factors affecting position allocation include level, variety, and complexity of work, and independence of action and decision-making responsibilities, supervision received, and for the manager levels, degree of supervisory responsibility and independent program responsibilities.

Schem Code	Class Code	Class
LE92	5170	Telecommunications Systems Analyst I
LE90	5171	Telecommunications Systems Analyst II
LE86	5135	Telecommunications Systems Manager I (Specialist)
LE84	5136	Telecommunications Systems Manager I (Supervisor)
LE82	5133	Telecommunications Systems Manager II (Supervisor)

Telecommunications Systems Analyst Series Specification - Class Titles and Codes

Definition of Levels

Telecommunications Systems Analyst I

This is the trainee and first working level in the series. Under close supervision, incumbents receive training and perform work ranging from the less complex to that of average difficulty in a wide variety of consultative, analytical, and evaluate assignments, such as program evaluation and planning, systems development, budget planning, research and management analysis, and perform other work as required to maintain and upgrade a telecommunications network. Positions are permanently allocated to this class when their major functions do not include the more independent, varied and difficult assignments found at the full journeyman level.

Telecommunications Systems Analyst II

This is the full journey person level in this series. Under direction, incumbents perform difficult telecommunications analytical work or act as lead person over other staff members in connection with inventory analysis, installation, maintenance and operation of statewide telecommunications systems, and independently develop a telecommunications operational network.

Telecommunications Systems Manager I (Specialist)

Under general direction in a department having a statewide radio/microwave or landwire communications network of moderate size, incumbents are responsible for the entire program and act as the departmental representative on communication matters. In the Department of General Services, incumbents under the general direction of a Telecommunications Systems Manager II or higher level position, are responsible for a specialized area of telecommunications systems where the level of expertise is definably above the Telecommunications Systems Analyst II and for providing consultative services to management of the Department of General Services and other departments. Positions allocated to this level are characterized by the following criteria:

- a. Functions as the recognized expert on telecommunications matters in department; and
- b. Functions as a skilled consultant to top management.

Telecommunications Systems Manager I (Supervisor)

This is the first supervisory or program management level in the series. Under general direction in a department having a statewide radio/microwave or landwire communications network of moderate size, incumbents are responsible for the entire program and act as the departmental representative on communication matters. Incumbents are responsible for the full range of functions required to maintain and upgrade the Department's telecommunications program. In the Department of General Services, incumbents, under general direction, are responsible for a specific area of the telecommunications program and supervise a small analytical and/or technical support staff, typically including three to five Telecommunications Systems Analysts or comparable level technical staff engaged in telecommunications system work.

Telecommunications Systems Manager II (Supervisor)

This is the full supervisory level of the series. Under general direction, in the Department of General Services, incumbents are responsible for a section of the telecommunications program; supervise a moderate size analytical and/or technical support staff, typically including six to ten Telecommunications Systems Analysts or comparable level technical staff engaged in telecommunications system work and provide consultation to management of both the Department of General Services and other departments.

Minimum Qualifications

All Levels:

Education: The following education is required when non-State experience is used to qualify at any level:

Equivalent to graduation from college, preferably with major specialization in electronics or related technical subject area. (Additional qualifying experience may be substituted for education on a year-for-year basis.)

Telecommunications Systems Analyst I

EITHER I

One year of experience performing telecommunications systems work which shall have included analyzing and making written reports or recommendations on radio/microwave and/or wire service staffing or systems.

OR II

Four years' experience in the California state service coordinating, operating, and/or maintaining telecommunications systems, such as performed by incumbents in the classes of Supervising Telephone Operator, Radio Dispatch Supervisor, or Communications Supervisor, California Highway Patrol.

OR III

Six months of experience performing the duties of a Management Services Technician, Range B, in a State service telecommunications operation.

OR IV

Two years' experience in the California state service in a formal telecommunications training and development assignment to a class equivalent to Management Services Technician. (Incumbents with 12 months' experience in a formal telecommunications training and development assignment may compete in the examination but must complete the training program before being eligible for appointment.)

Education: Indicated above.

Telecommunications Systems Analyst II

EITHER I

One year of experience in the California state service performing the duties of a Telecommunications Systems Analyst I, Range C.

OR II

Experience: Three years of analytical experience in planning, organizing and coordinating maintenance and upgrade activities for telecommunications systems such as radio/microwave and/or wire service systems. (Experience in California state service applied toward this requirement must include at least one year performing the duties of a class at a level of responsibility not less than that of Telecommunications Systems Analyst I, Range C.)

Telecommunications Systems Manager I (Specialist)

Telecommunications Systems Manager I (Supervisor)

EITHER I

One year of experience in the California state service performing the duties of a Telecommunications Systems Analyst II.

OR II

Experience: Five years of analytical experience in planning, organizing and coordinating maintenance and upgrade activities for telecommunications equipment such as radio/microwave and/or wire service systems. (Experience in California state service applied toward this requirement must include one year performing the duties of a class with a level of responsibility not less than that of Telecommunications Systems Analyst II.)

Telecommunications Systems Manager II (Supervisor)

EITHER I

One year of experience in the California state service performing the duties of a Telecommunications Systems Manager I (Specialist) or Telecommunications Systems Manager I (Supervisor) or two years of experience as Telecommunications Systems Analyst II.

OR II

Experience: Broad and extensive (more than five years) experience in planning, organizing and coordinating maintenance and upgrade activities for telecommunications programs, such as radio/microwave and/or wire service systems. (Experience in California state service applied toward this requirement must include at least two years performing the duties of a class with a level of responsibility not less than that of Telecommunications Systems Analyst II.)

Knowledge and Abilities

Telecommunications Systems Analyst I

Knowledge of: Basic theory of telecommunications and electronics.

Ability to: Perform communication studies; analyze situations and take effective action; communicate effectively and prepare reports.

Telecommunications Systems Analyst II

Knowledge of: All of the above, and operation of electronic telecommunications systems including microwave and complex multiple carrying equipment, radio control equipment and closed circuit television systems.

Ability to: All of the above, and interpret the law on those matters pertaining to access, easements and occupancy of communications facilities as required; formulate and implement operational and training procedures of telecommunications systems.

Telecommunications Systems Manager I (Specialist)

Knowledge of: All of the above, and Federal Communications Commission rules and regulations pertaining to telecommunications systems; State administrative and budgetary procedures and practices.

Ability to: All of the above, and to develop, prepare and present the department's telecommunications' budget and coordinate communications requirements with various governmental agencies; coordinate with utility companies, private citizens, corporations and companies those matters pertaining to access, easements, and occupancy of communications facilities as required.

Telecommunications Systems Manager I (Supervisor)

Knowledge of: All of the above, and principles of supervision and training; Department's Affirmative Action Program objectives; a manager's role in the Affirmative Action Program and the processes available to meet affirmative action objectives.

Ability to: All of the above, and supervise the work of others; effectively contribute to the Department's affirmative action objectives.

Telecommunications Systems Manager II (Supervisor)

Knowledge of: All of the above, and the Department's Affirmative Action Program objectives; a manager's role in the Affirmative Action Program and the processes available to meet affirmative action objectives.

Ability to: All of the above, and plan, organize and direct a complex and extensive telecommunications program; effectively contribute to the Department's affirmative action objectives.

Special Personal Characteristics

All Levels:

Willingness to travel throughout the State.

Class History

Class	Date Established	Date Revised	Title Changed
Telecommunications Systems Analyst I	05/07/1975	06/19/2014	--
Telecommunications Systems Analyst II	05/07/1975	06/19/2014	--
Telecommunications Systems Manager I (Specialist)	05/07/1975	06/19/2014	11/07/1984
Telecommunications Systems Manager I (Supervisor)	11/07/1984	06/19/2014	--
Telecommunications Systems Manager II (Supervisor)	05/05/1987	06/19/2014	--
Telecommunications Systems Analyst Series History - Dates Established, Revised, and Title Changed			

Updated 7/28/2014